

## **EFFICIENT USE OF KEYFRAMES IN VIDEO COMPRESSION**

### **ABSTRACT OF THE DISCLOSURE**

One embodiment disclosed relates to a method for encoding and decoding a video sequence in which a keyframe is used to bi-directionally predict frames in the sequence. The keyframe is coded independently of other frames in the sequence. Both a prior frame occurring before the keyframe and a subsequent frame occurring after the keyframe are predicted using data from the keyframe. Another embodiment disclosed relates to a method for allocating bits to a keyframe during video encoding. Effects of a plurality of keyframe bit allocations on quality of a predicted frame are measured. Said effects are used to determine a near optimal keyframe bit allocation.